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May 2000

***Institutional Controls Status Report at
Test Area North, Waste Area Group 1***

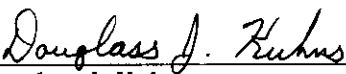
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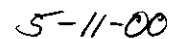
**Prepared for the
U.S. Department of Energy
Idaho Operations Office**

Institutional Controls Status Report at Test Area North, Waste Area Group 1

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Under DOE Idaho Operations Office
Contract DE-AC07-99ID13727

ABSTRACT

This report presents the status of institutional control measures currently being taken for Waste Area Group 1 sites at Test Area North on the Idaho National Engineering and Environmental Laboratory. This status report contains a record of recent inspections, site histories, brief profiles of contaminants, and summaries of future actions. This status report meets the 6-month reporting requirement of the U.S. Environmental Protection Agency Region 10 Final Policy on the use of institutional controls at federal facilities.

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ACRONYMS

CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
D&D&D	dismantlement, decontamination, and decommissioning
DOE-ID	U.S. Department of Energy Idaho Operations Office
EPA	U.S. Environmental Protection Agency
FFA/CO	Federal Facility Agreement and Consent Order
GWTF	Groundwater Treatment Facility
IET	Initial Engine Test Facility
INEEL	Idaho National Engineering and Environmental Laboratory
LOFT	Loss-of-Fluid Test
MCP	management control procedure
OU	operable unit
POD	plan of the day
RCRA	Resource Conservation and Recovery Act
ROD	Record of Decision
RWP	radiological work permit
RPSSA	Radioactive Parts Service and Storage Area
SMC	Specific Manufacturing Capability
STD	standard
TAN	Test Area North
TSF	Technical Support Facility
WAG	waste area group
WRRTF	Water Reactor Research Test Facility

Institutional Controls Status Report at Test Area North, Waste Area Group 1

1. INTRODUCTION/PURPOSE

This report describes the status of institutional control measures currently being taken to ensure the protection of human health and the environment at the sites within Waste Area Group (WAG) 1 identified in the Record of Decision (ROD) for Operable Unit (OU) 1-10 as Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) release sites. Ninety-four sites were identified as potential release sites, of which 83 sites were identified as being "No Action," where land use is unrestricted, or as "No Further Action," where institutional controls are required to restrict land use in the future. Eight sites are scheduled for remediation, with institutional controls to be determined following remediation. The Technical Support Facility (TSF) Injection Well (TSF-05) and surrounding groundwater contamination (TSF-23) are being remediated in accordance with the ROD for OU 1-07B, and are included in this report. The Mercury Spill Area (TSF-08) was selected for a treatability study under WAG 10 and is also included in this institutional control status report.

The U.S. Environmental Protection Agency (EPA) Region 10 requires that the status of institutional controls be reported within six months of approval of the ROD, and then at least annually thereafter. The WAG 1 sites requiring institutional controls were inspected on March 23 and 28, 2000; however, certain sites could not be visited at that time due to military maneuvers north of the Test Area North (TAN) fence. Consequently, the results of a previous inspection are reported for these sites. Inspection results for OU 1-10 are presented in Appendix A, inspection results and location coordinates for OU 1-07B sites are presented in Appendix B, and coordinates for OU 1-10 sites are presented in Appendix C.

2. INEEL/TAN BACKGROUND

The Idaho National Engineering and Environmental Laboratory (INEEL) is a government-owned/contractor operated facility managed by the U.S. Department of Energy Idaho Operations Office (DOE-ID) (Figure 1). The INEEL, located 51 km (32 mi.) west of Idaho Falls, Idaho, occupies 2,305 km² (890 mi²) of the northeastern portion of the Eastern Snake River Plain, and encompasses portions of five Idaho counties: (1) Butte, (2) Jefferson, (3) Bonneville, (4) Clark, and (5) Bingham.

The Test Area North (TAN) is located in the north-central portion of the INEEL and covers an area of approximately 41-ha (102-acres). The TAN area was established in the 1950s by the U.S. Air Force and the Atomic Energy Commission Aircraft Nuclear Propulsion Program. Today, TAN has four different facilities: (1) the TAN TSF, (2) the Initial Engine Test Facility (IET), (3) the Water Reactor Research Test Facility (WRRTF), and (4) Specific Manufacturing Capability (SMC)/Loss-of-Fluid Test (LOFT) Facility. Figure 1 shows the locations of the TAN facilities within the INEEL, and Figure 2 shows the TSF, IET, WRRTF, and LOFT facilities at TAN.

Unless circumstances change, like the resumption of former levels of defense-related activities, the future of TAN will consist of completing current programs, deactivating all facilities, and completing environmental restoration activities. The WRRTF is scheduled for a major rehabilitation to support ongoing research and development activities, and is expected to be operational for another 20 years. Major facility construction will not be part of the future of TAN due to the proposed reduction in activities there. The remedial actions selected in the OU 1-10 ROD are designed to reduce the potential threats to human health and the environment to acceptable levels.

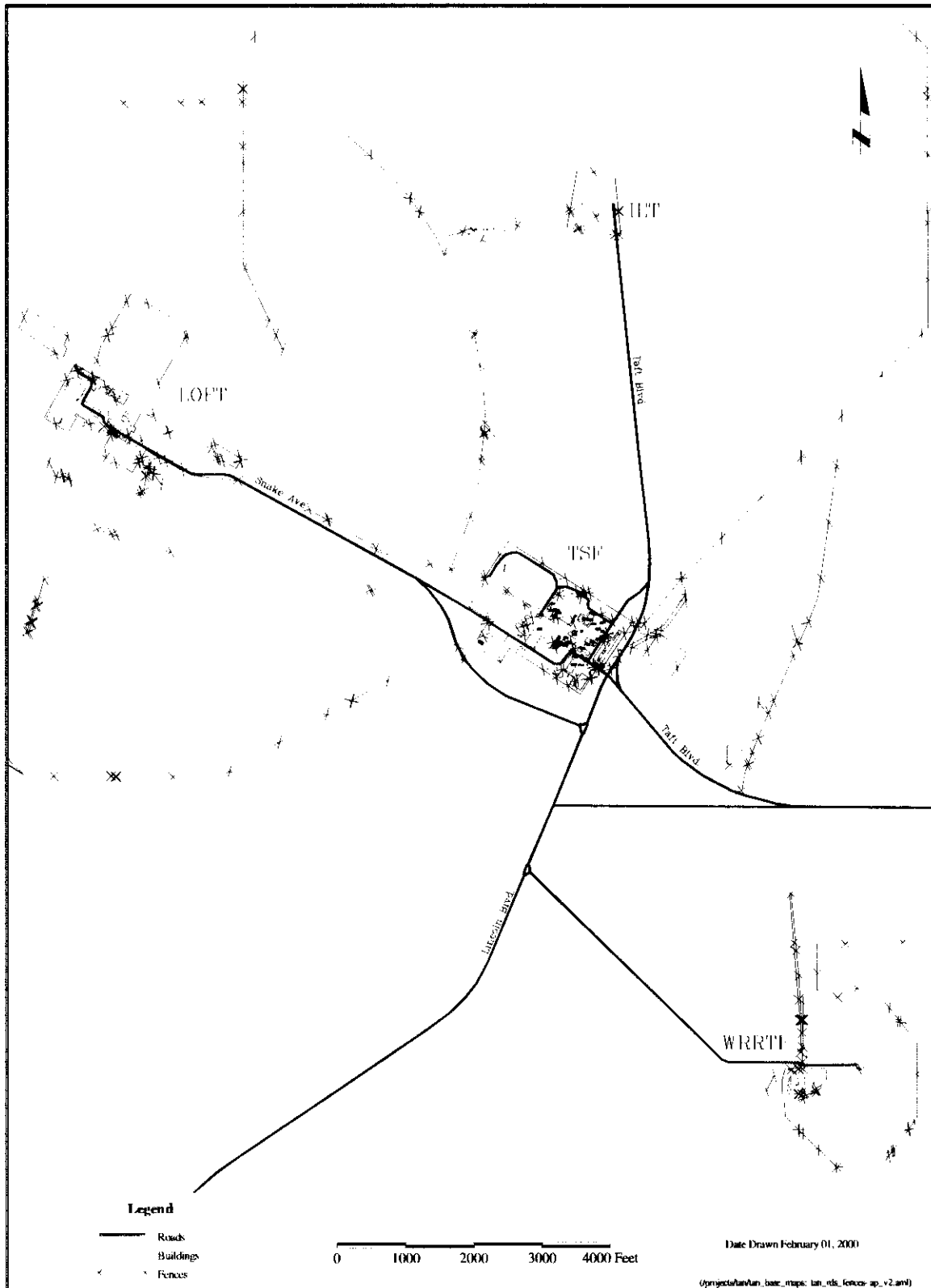


Figure 2. Test Area North Facilities.

3. INSTITUTIONAL CONTROLS

The TAN sites listed in the ROD as requiring remedial action and/or long-term institutional controls are presented in Table 1. Figure 3 shows the location of these sites. Details on site location, history, action, and the institutional controls at each location are presented in Appendix A. TSF-23 is detailed and mapped in Appendix B. Coordinates for all other locations are included in Appendix C.

Table 1. Sites at TAN requiring remedial action and/or long-term institutional controls.

Site Code	Description	Action	Current Status of Institutional Controls As of March 2000	Administrative Controls
TSF-03	TSF Burn Pit	Native soil cover/ institutional control	Fencing, gate open, “Environmentally Controlled Area” sign	STD-101 ^a
TSF-06, Area B	TAN/TSF Soil Contamination Area South of the Turntable	Excavation and disposal of contaminated soil/ institutional control	No signs, no specific fencing, unrestricted access within the facility fence	STD-101
TSF-07	TSF Disposal Pond	Limited action/ institutional control	Fences and warning signs in place, access restricted, radiation work permit—fence is in disrepair	POD ^b , RWP ^c , STD-101
TSF-09	TSF Intermediate- Level radioactive waste disposal system	Soil and tank removal, treatment and disposal of tank contents	Fences and warning signs in place, access restricted, radiation work permit	POD, RWP, STD-101
TSF-18	Contaminated tank southeast of Tank V-3	Soil and tank removal treatment and disposal of tank contents	Fences and warning signs in place, access restricted, radiation work permit	POD, RWP, STD-101
TSF-26	TSF PM-2A Tanks	Soil excavation, tank contents removal, treatment and disposal/ institutional control	Fences and warning signs in place, access restricted, radiation work permit	POD, RWP, STD-101
WRRTF-01	Burn Pits I, II, III, IV	Native soil cover/ institutional control	No fencing, “Environmentally Controlled Area” sign	STD-101
WRRTF-13	WRRTF Fuel Leak	Excavation and land farming/ institutional control	Facility fenced and access restricted, no signs	POD, STD-101

Table 1. (continued).

Site Code	Description	Action	Current Status of Institutional Controls As of March 2000	Administrative Controls
TSF-05	TSF Injection Well	In situ bioremediation/institutional control	Locked well house and access controlled groundwater treatment facility	POD, RWP, STD-101, MCP-3562 ^d
TSF-23	Contaminated groundwater beneath TSF	Pump and treat/monitored natural attenuation/institutional control	Locked wells penetrating the groundwater for monitoring purposes and access controlled air stripper treatment unit	STD-101, MCP-3562
IET-04	IET Stack Rubble Site	Institutional control	Warning sign, monument within access control fence	STD-101
TSF-06, Area 1	TAN/TSF Soil Area Northeast of Turntable	Institutional control	Fences and warning signs in place, access restricted, radiation work permit	POD, RWP, STD-101
TSF-06, Area 5	TAN/TSF Soil Area, Radioactive Soil Berm	Institutional control	Fences and warning signs in place, access restricted, radiation work permit	POD, RWP, STD-101
TSF-06, Area 11	TAN/TSF Soil Area, TSF-06 Ditch	Institutional control	Fences and warning signs in place, access restricted, radiation work permit	POD, RWP, STD-101
TSF-08	TSF HTRE III Mercury Spill Sites 13B and 13C	Phytoremediation and institutional control	Within facility fence, no signs.	STD-101
TSF-10	Drainage Pond	Institutional controls	Within facility fence, warning sign on public side	STD-101
TSF-28	TSF Sewage Treatment Plant and sludge drying beds	Institutional control	Rope fence and warning signs in place at drying beds	STD-101, MCP-3562
TSF-29	TSF Acid Pond east of RPSSA-647 and -648	Institutional control	Fences and warning signs in place, access restricted, radiation work permit	POD, RWP, STD-101
TSF-39	TSF Transite (asbestos) Contamination	Institutional control	Facility fence around gravel pit, "Environmentally Controlled Area" sign	STD-101

Table 1. (continued).

Site Code	Description	Action	Current Status of Institutional Controls As of March 2000	Administrative Controls
TSF-42	TAN-607-A Room 161 Contaminated Pipe	Institutional controls only until completion of dismantlement, decontamination, and decommissioning (D&D&D)	Radiation sign, restricted access on building	POD, RWP, STD-101, MCP-3562
TSF-43	RPSSA Buildings 647/648 and Pads	Institutional controls only until completion of D&D&D	Radiation sign, restricted access on building, radiation work permit	POD, RWP, STD-101

a. STD-101—Standard 101, “Integrated Work Control Process.” The Integrated Work Control Process (IWCP) is the method by which the Integrated Safety Management System (ISMS), Enhanced Work Planning (EWP), and Voluntary Protection Program (VPP) are implemented for maintenance and construction work activities. It provides a single process by which all maintenance and construction work on the INEEL is performed. It establishes the process by which all work is screened consistently to uniform criteria to ensure that hazards are appropriately identified, analyzed, and controlled.

b. POD—Plan of the Day is a scheduled daily meeting that provides specific management direction for coordinated resource allocation and priority setting for completing scheduled activities. The POD process is vitally important in ensuring operational activities and maintenance work performed in a facility are properly authorized by line management responsible for the area or facility.

c. RWP—Radiological Work Permits are used to establish radiological controls for entry into areas controlled for radiological purposes. They serve to inform workers of area radiological conditions, to inform workers of entry requirements into the areas, and provide a means to relate radiation doses received by workers due to specific work activities.

d. MCP-3562—“Hazards Identification, Analysis and Control of Operational Activities.” This procedure describes how ISMS, EWP, and VPP are implemented for operational activities, and describes the process for performing hazards identification, analysis, and control of operational activities. Operational activities are any activities involving the conduct of business of hardware-related facilities, processes, systems, structures; or equipment that produce products or services such as experimental test facilities, nuclear reactors, or waste processing, sampling, and analysis activities; or operating and storage facilities.

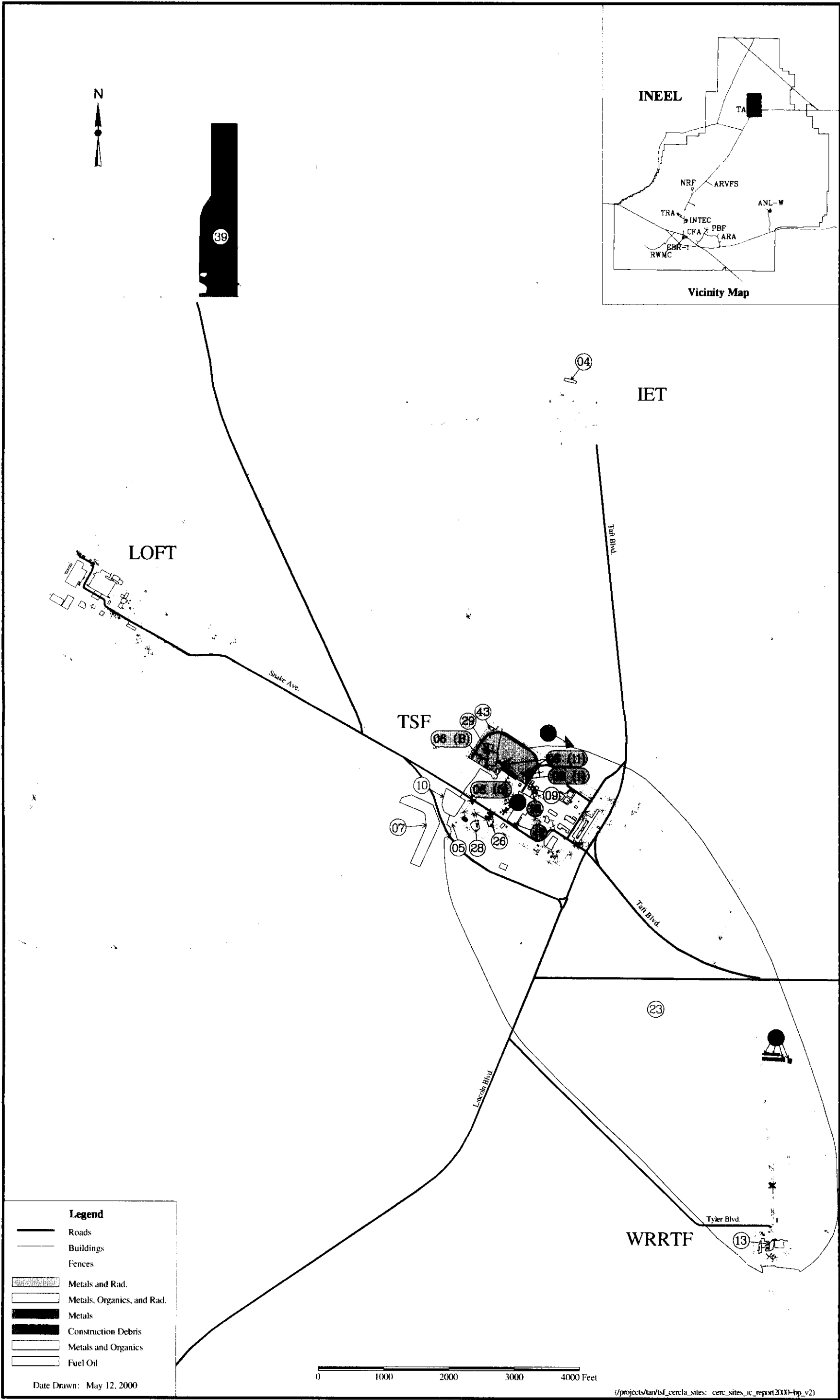


Figure 3. Locations of institutional control sites at TSF, LOFT, IET, and WRTF.

4. OU 1-10 ROD DIRECTIVES

As established in the OU 1-10 ROD, the inspections of TAN CERCLA sites and well heads found inconsistencies and inadequacies in control measures from site to site. The specific findings of the inspections are reported in Appendix A; however, the general findings included a lack of clear informative signage, fences and gates in need of repair, and insufficient administrative controls. The actions taken to mitigate these inconsistencies are briefly discussed in this section.


The lack of clear, informative signage will be addressed throughout all TAN CERCLA sites. The objectives of this effort will include:

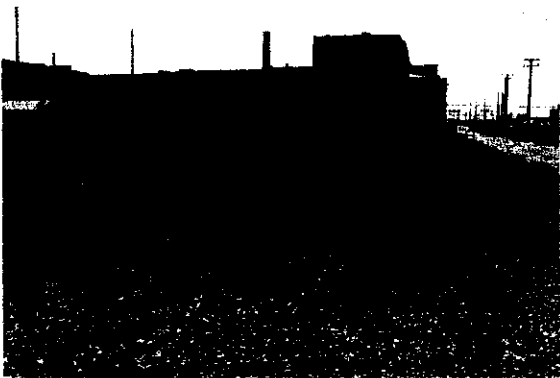
- Placing signs at the access point(s) of each CERCLA site and well head or well grouping that:
 - Identify the Federal Facility Agreement and Consent Order (FFA/CO) representative with contact information
 - List radiological work permit (RWP) and plan of the day (POD) requirements at the site
 - List either contaminant(s) of concern or contaminant(s) of potential concern
 - Include maps that locate the sites and reader position
 - Identify waste handling concerns if applicable.
- Maintaining fencing and gating; specific fencing repair is needed at TSF-07.
- Implementing sufficient administrative controls such as facility representative notifications, Radiological Work Permits, Plan of the Day notifications, and controls over waste generated at the sites.


The above controls are intended to ensure the protection of human health and the environment by eliminating inadvertent entry onto the sites.

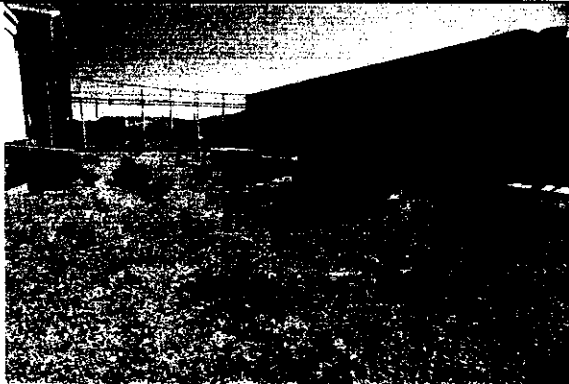
Appendix A


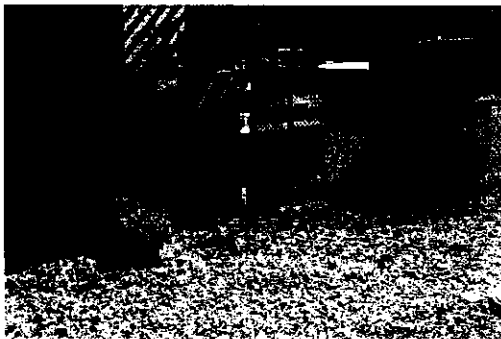
Institutional Controls


<p align="center">TSF-03 Burn Pit</p>	<p align="center">Facility Security Fence</p>	<p align="center">Signs</p>	<p align="center">Fences</p>	<p align="center">Other</p>	<p align="center">Administrative for Access to the Site</p>	<p align="center">Administrative to Work at the Site</p>
<p>History: The TSF-03 Burn Pit is located northwest of Columbia Street gate access, outside the TSF facility fence. The Burn Pit was potentially used for open burning of combustible waste from 1953 to 1958. The site has been backfilled, subsidence control has been maintained, and vegetation has been reestablished. The pit received refuse, construction debris, and combustible liquids (i.e., petroleum products) from the TAN areas. It is possible that some oil, Stoddard solvent, and oily waste (from the limited maintenance activities at TAN) were burned at the pit.</p> <p>Contaminant of Concern: lead</p> <p>Action: Remedial action is to install native soil cover. A contingency remedy is excavation and disposal of contaminated soil.</p>	<p align="center">No</p>	<p align="center">Environmental Control Sign</p>	<p align="center">Yes, gate open</p>	<p align="center">No</p>	<p align="center">Access control, sign in</p>	<p align="center">STD-101</p>
	<p>Comments</p> <p>This site was closed to all personnel during March 2000. Notes from inspection of November 3, 1999, were used.</p>					
<p align="center">Photo File: PN 99-0405-4-28</p>	<p align="center">Inspection Date: November 3, 1999</p>					


TSF-06, Area B Soil Contamination Area South of Turntable		Facility Security Fence	Signs	Fences	Other	Administrative for Access to the Site	Administrative to Work at the Site
History: TSF-06 is a large, open, soil area with elevated levels of radioactive contamination, which also contains 13 subareas with discrete boundaries and types of contaminants. Source of contamination in Area B is windblown contamination from soil surrounding the PM-2A Tanks (TSF-26). Contaminant of Concern: Cs-137. Action: Remedial action will be to excavate and dispose of contaminated soil. Institutional controls will be established and maintained as determined by post-remediation sampling.		Yes	No	No	No	No	STD-101
		Comments This site is lacking physical and posted administrative controls. Inspection Date: March 23, 2000					
Photo File: PN990405-2-8							

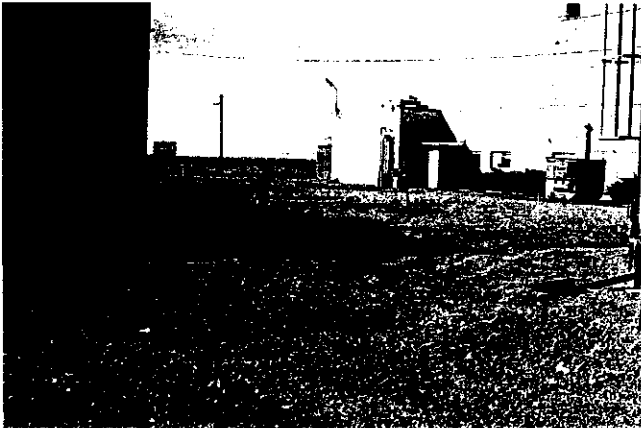
TSF-07 Disposal Pond		Facility Security Fence	Signs	Fences	Other	Administrative for Access to the Site	Administrative to Work at the Site
<p>History: TSF-07 is an unlined disposal pond located southwest of TSF. The TSF-07 site encompasses an area of approximately 35 acres, of which 5 acres in the northeast corner and on the eastern edge are contaminated with radionuclides and metals. The remaining 30 acres have never received wastewater and are not contaminated based on available field screening data. The TSF-07 pond is surrounded by a 1.5 m (5 ft) tall berm and is unlined. The active portion of the pond consists of a 1.5 acre main pond and a 1 acre overflow pond. The disposal pond replaced the TSF-05 injection well and began receiving wastewater in September 1972. The pond received wastewater from a variety of sources that included sanitary waste discharges, low-level radioactive waste, cold process water, and treated sewage effluent that originated from TAN service buildings and processes. Current discharges to the TSF-07 pond include treated sewage and boiler blow-down, and process wastewater that has been monitored for nonradiological parameters from about 1986 to the present. A section of the pond was portioned in 1992 and 1993 for discharge of treated water from the OU 1-07A interim action.</p> <p>Contaminant of Concern: Cs-137.</p> <p>Action: Limited action.</p>		No	Yes	Yes	No	Sign at gate advise of RWP and POD requirements	RWP, POD and, STD-101
		<p>Comments:</p> <p>Original drainage pond is divided by a newer fence (1992-1993) parallel to the roadway, which is in good condition. There are two fallen posts beside the gate near the roadway.</p>					
<p>Photo File: PD000128-06</p>		<p>Inspection Date: March 23, 2000</p>					

TSF-09 Intermediate-Level (Radioactive) Waste Disposal System		Facility Security Fence	Signs	Fences	Other	Administrative for Access to the Site	Administrative to Work at the Site
<p>History: TSF-09 consists of three abandoned stainless-steel tanks installed about 1957 and used for the treatment, storage, and disposal of radioactive and liquid wastewater. Historical site data, Track 2 investigations, field surveys, and soil data shows that radioactive contaminants are present in the upper 0.15 m (0.5 ft) of the site soil, likely from loose contamination migrating from the adjacent buildings and rooftops. The main contaminants are Cs-137, Co-60 and Sr-09 and gross alpha. The presence of trichloroethylene and Cs-137 at depth indicates a subsurface source. Currently, the TSF-09 V-tanks and the TSF-18 tank are not believed to be leaking.</p> <p>Contaminant of Concern: Cs-137</p> <p>Action: The major components of the selected remedy include excavating and disposing of contaminated soils, sampling of tank contents, removal and treatment and disposal of tank contents, decontamination, removal and disposal of tanks, soil sampling, soil excavation and disposal, clean fill, grading and contour, and institutional controls as needed.</p>		Yes	Yes	Yes	Locked, call TAN Supervisor	Sign at gate advises of RWP and POD requirements	RWP, POD, and STD-101
		<p>Comments</p> <p>Site has a 3-ft snow fence with gate and lock. There is a tear in lower edge of south wall of fence sufficient to permit a rabbit to enter site.</p> <p>The same fencing controls TSF-09 and TSF-18. Signs are present.</p>					
<p>Photo File: PN990405-2-29</p>		<p>Inspection Date: March 23, 2000</p>					

TSF-18 Contaminated Tank SE Of Tank V-3 (Tank V-9)		Facility Security Fence	Signs	Fences	Other	Administrative for Access to the Site	Administrative to Work at the Site
<p>History: TSF-18 consists of a single tank used to filter and treat wastewater as a part of the Intermediate-Level (Radioactive) Disposal System (TSF-09). The tank was installed in 1970 and only operated for one day before becoming inoperable. Preliminary scoping information and historical site data indicate that the tank was radioactively contaminated and that the soil around TSF-18 is also likely contaminated from processes at TSF-09. Therefore, TSF-18 has been combined with the investigation at TSF-09, since the two sites are contiguous, have similar contamination, and will likely require the same remedial decision.</p> <p>Contaminant of Concern: Cs-137</p> <p>Action: The major components of the selected remedy include excavating and disposing of contaminated soils, sampling of tank contents, removal and treatment and disposal of tank contents, decontamination, removal and disposal of tanks, soil sampling, soil excavation and disposal, clean fill, grading and contour, and institutional controls as needed.</p>		Yes	Yes	Yes	Locked	Sign at gate advises of RWP and POD requirements	RWP, POD, and STD-101
		<p>Comments</p> <p>Site has a 3 ft snow fence with gate and lock. There is a tear in lower edge of south wall of fence sufficient to permit a rabbit to enter site.</p> <p>The same fencing controls TSF-09 and TSF-18. Signs are present.</p> <p>Inspection Date: March 23, 2000</p>					
Photo File: PN990405-2-31	Photo File: PN990405-2-27						

TSF-26 PM-2A Tanks and Rad Soil Stockpiles		Facility Security Fence	Signs	Fences	Other	Administrative for Access to the Site	Administrative to Work at the Site
<p>History: TSF-26 is a large, open soil area with elevated levels of radioactive contamination, which also contains two underground storage tanks (USTs) that were used for the treatment, storage, and disposal of radioactive waste and other wastewater. Historical site data, Track 2 site investigations, field surveys, and soil data show that radioactive contaminants are present in the site soil.</p> <p>Contaminant of Concern: Cs-137</p> <p>Action: The major components of the selected remedy include excavating and disposing of contaminated soils, sampling of tank contents, removal and treatment and disposal of tank contents, decontamination and clean fill of tanks, soil sampling, soil excavation and disposal, clean fill, grading and contour, and institutional controls as needed.</p>		Yes	Environmental Control sign by gate, and sign to contact Shift Supervisor	6 ft chain link fence	Locked, see Deanna Hogan for key	Call Shift Supervisor, RWP, POD	RWP, POD, STD-101
		<p>Comments:</p> <p>Fence is in good condition.</p>					
Photo File: PN990405-1-26		Inspection Date: March 23, 2000					

WRRTF-01 Burn Pits I, II, III, IV		Facility Security Fence	Signs	Fences	Other	Administrative for Access to the Site	Administrative to Work at the Site
<p>History: The WRRTF Burn Pits are located approximately 823 m (2,700 ft) north of WRRTF. These burn pits were used for open burning of combustible waste generated at the TAN facilities from 1958 to 1975, and involved four separate areas. Burn Pit I opened after TSF-03 Burn Pit was filled, and received both combustible solids and liquids from 1958 to 1964. Burn Pits II and III were opened after Burn Pit I was filled and operated from 1964 to 1970. Burn Pit II also may have received only combustible solids while Burn Pit III received only combustible liquids. Burn Pit III received petroleum products. Burn Pit IV was opened because Burn Pit II was filled and received mainly combustible solids and some reportedly noncombustible solids (automobiles, metal goods, etc.) Minor amounts of combustible liquids may have been disposed of in Burn Pit IV. No RCRA wastes are suspected of having been disposed of at these sites. The sites have been backfilled and vegetation reestablished; however, at Pits I, II, and IV subsidence control has not been maintained.</p> <p>Contaminant of Concern: lead</p> <p>Action: Remedial action is to install native soil cover. A contingency remedy is excavation and disposal of contaminated soil.</p>		No	Yes	No	No	There are signs on public accesses limiting unauthorized travel on site	STD-101
		<p>Comments</p> <p>The corners of each burn pit is marked with a rebar stake.</p> <p>Inspection Date: March 23, 2000</p>					
<p>Photo File: PN000128-02</p>							

<p align="center">WRRTF-13 Fuel Leak</p>	Facility Security Fence	Signs	Fences	Other	Administrative for Access to the Site	Administrative to Work at the Site
<p>History: WRRTF-13 is the environmental contamination associated with the diesel fuel oil discovered at the WRRTF-05 injection well in November 1993. The results of the OU 1-08 Track 2 investigation indicate soil contamination at WRRTF-13 is at depth (5 ft or greater) and contaminants detected at the site were found at relatively low concentrations.</p> <p>Contaminant of Concern: petroleum hydrocarbons</p> <p>Action: The selected remedy includes sampling, excavation and land farming of contaminated soil, backfilling with clean soil, contouring and grading to surrounding soil.</p>	Yes	No	Yes		Guard gate, card reader access, POD	POD, STD-101
	<p>Comments:</p> <p>Sign was present but broken and fallen.</p> <p>Notification to facility manager required for entry.</p>					
<p align="center">Photo File: PN000128-04</p>	<p>Inspection Date: March 23, 2000</p>					

TSF-05 Injection Well

History:

TSF-05 injection well was drilled in 1953 to a depth of 93.0 m (305 ft) to dispose of liquid effluent generated from the ANP Program slated to be sited at TAN. The well was last used as a primary disposal site in September 1972, after which wastewaters were diverted to the TSF disposal pond. Discharges included treated sanitary sewage, process wastewaters, and low-level radioactive waste streams from TSF-09 and TSF-26.

Contaminants of Concern: cis-1,2-dichloroethene, trans-1,2-dichloroethene, trichloroethene, tetrachloroethene, Sr-90, tritium, Cs-137, and U-234.

Action:

In situ bioremediation.

Facility Security
Fence

Yes

Signs

Yes

Fences

GWTF area fence

Other

Locked well house

Administrative
for Access to the
Site

Contact construction engineer,
HASP training required

Administrative
to Work at the
Site

MCP-3562, STD-101





Photo File: PN000128-40


Comments:


Inspection Date: March 23, 2000


TSF-23 Contaminated Groundwater Beneath TAN		Facility Security Fence	Signs	Fences	Other	Administrative for Access to the Site	Administrative to Work at the Site
<p>History: TSF-23 is the surrounding groundwater contamination associated with the TSF-05 Injection Well. In 1987, low levels of trichloroethene and tetrachloroethene were detected in wells used to supply drinking water to workers at TAN. A remedial investigation/feasibility study was completed in 1994 to characterize the extent and nature of the contamination and determine what cleanup was required. Pump-and-treat containment of the hot spot started in 1996. Air sparging was installed on the drinking water supply system to mitigate potential risks to TAN personnel. Groundwater monitoring has been implemented to track the extent of the contaminant plume, document fluctuations in TCE concentrations, and measure the attenuation rate of the plume. Institutional controls were specified to protect current and future users from health risks associated with groundwater contamination.</p> <p>Contaminants of Concern: cis-1,2-dichloroethene, trans-1,2-dichloroethene, trichloroethene, tetrachloroethene, Sr-90, Cs-137, and U-234.</p> <p>Action: Pump and treat and monitored natural attenuation.</p>			Yes		Well heads locked	Contract construction engineer, HASP training required.	MCP-3562, STD-101
<p>See Appendix B and Figure B-1 for well locations in TSF-23.</p>		<p>Comments</p> <p>Keys for locked caps on all wells obtained from the OU 1-07B construction engineer.</p> <p>All wells included in the OU 1-07B Phase C Monitoring Plan have been inspected.</p> <p>Inspection Dates: March 23 and 28, 2000</p>					


IET-04 Stack Rubble Site		Facility Security Fence	Signs	Fences	Other	Administrative for Access to the Site	Administrative to Work at the Site
<p>History: IET-04 contains buried rubble from the IET exhaust stack and monitoring vault. These structures were used from 1958 to 1961 to release exhaust from the nuclear jet engine into the atmosphere. The structures were decontaminated and decommissioned in 1986 and 1987 by removing the loose contamination from inside the structures for off-site disposal and then backfilling the structures into a trench. The site currently is buried 4.6 to 6.1 m (15 to 20 ft) below the ground surface.</p> <p>Contaminant of Potential Concern: radionuclides.</p> <p>Action: No Action Site requiring institutional controls.</p>		Yes	Yes	No	Monument	Access to site restricted, contact Facility Rep.	STD-101
		<p>Comments:</p> <p>Site was inspected on November 3, 1999. On March 23, 2000, the site was restricted due to military maneuvers.</p> <p>Inspection Date: November 3, 1999</p>					
<p>Photo File: PN990405-2-29</p>							


<p align="center">TSF-06 Area 1 Soil Area Northeast of Turntable</p>		Facility Security Fence	Signs	Fences	Other	Administrative for Access to the Site	Administrative to Work at the Site
<p>History: TSF-06 is a large, open, soil area with elevated levels of radioactive contamination, which also contains 13 subareas with discrete boundaries and types of contaminants. The main contaminants of concern are Cs-137, Co-60 and Sr-90. Source of contamination in Area B is windblown contamination from soil surrounding the PM-2A tanks (TSF-26).</p> <p>Contaminant of Potential Concern: radionuclides.</p> <p>Action: No Action Site requiring institutional control.</p>		Yes	Yes	Yes	Gated entry point by bully barn	Access restricted, RWP, POD	RWP, POD, STD-101
		<p>Comments:</p> <p>Site within TSF-06 area fence.</p>					
<p align="center">Photo File: PN000128-19</p>		<p align="center">Inspection Date: March 23, 2000</p>					


TSF-06, Area 5 Radioactive Soil Berm		Facility Security Fence	Signs	Fences	Other	Administrative for Access to the Site	Administrative to Work at the Site
<p>History: TSF-06 is a large, open, soil area with elevated levels of radioactive contamination, which also contains 13 subareas with discrete boundaries and types of contaminants. The main contaminants of concern are Cs-137, Co-60, and Sr-90. Source of contamination in Area B is windblown contamination from soil surrounding the PM-2A tanks (TSF-26).</p> <p>Contaminant of Potential Concern: radionuclides.</p> <p>Action: No Action Site requiring institutional control.</p>		Yes	Yes	Yes	Gated entry point by bully barn	Access restricted, RWP, POD	RWP, POD, STD-101
		<p>Comments:</p> <p>Site within TSF-06 area fence.</p>					
<p>Photo File: PN000128-21</p>		<p>Inspection Date: March 23, 2000</p>					


TSF-06, Area 11 TSF-06 Ditch		Facility Security Fence	Signs	Fences	Other	Administrative for Access to the Site	Administrative to Work at the Site
History: TSF-06 is a large, open, soil area with elevated levels of radioactive contamination, which also contains 13 subareas with discrete boundaries and types of contaminants. The main contaminants of concern are Cs-137, Co-60, and Sr-90. Source of contamination in Area B is windblown contamination from soil surrounding the PM-2A Tanks (TSF-26). Contaminant of Potential Concern: radionuclides. Action: No Action Site requiring institutional control.		Yes	Yes	Yes	Gated entry point by bully barn	Access restricted, RWP, POD	RWP, POD, STD-101
		Comments: Site is within TSF-06 area fence. The "Y" shaped ditch is of concern in two areas only; the west end of the ditch, and the northern leg of the "Y". Photo shows the northern end of the ditch. The remainder of the ditch is clean.					
Photo File: PN000128-24		Inspection Date: March 23, 2000					


TSF-08 Mercury Site		Facility Security Fence	Signs	Fences	Other	Administrative for Access to the Site	Administrative to Work at the Site
History: Mercury was used extensively at the TSF from the late 1950s to the early 1960s. It is reported that mercury leaked onto the ground and railroad system. Contaminant of Concern: mercury. Action: Phytoremediation as part of a WAG 10 treatability study.		Yes	No	No	None		STD-101
		Comments: Site is identified by a stake, showing the location of future signage.					
Photo File: PN040599-2-10		Inspection Date: March 23, 2000					


TSF-10 Drainage Pond		Facility Security Fence	Signs	Fences	Other	Administrative for Access to the Site	Administrative to Work at the Site
<p>History: TSF-10 is an infiltration pond for surface-water discharge. The Preliminary scoping information and historical site investigation with previous soil sample data indicate that no significant contamination is present at the site. Track 2 site investigations show that no waste disposal activities have occurred at the site. Radiation field surveys detected no evidence of contamination, and site visits show no evidence of stressed vegetation. Metals and low-level radionuclide contamination may be present.</p> <p>Contaminants of Potential Concern: metals, radionuclides.</p> <p>Action: No Further Action Site requiring institutional control.</p>		Yes	Yes	No		No restriction once inside Facility Security Fence	STD-101
		<p>Comments:</p> <p>Fencing in area, no gate.</p> <p>Inspection Date: March 23, 2000</p>					
Photo File: PN000128-09							

TSF-28 Sewage Treatment Plant And Sludge Drying Beds		Facility Security Fence	Signs	Fences	Other	Administrative for Access to the Site	Administrative to Work at the Site
<p>History: TSF-28 is the Sewage Treatment Plant (STP) that provides primary and secondary treatment for all TSF sanitary waste. Until 1972, treated effluent from the STP was disposed in the TSF-05 injection well. Since 1972, the effluent has been routed to a lift station in TAN-655 and pumped to the TSF-07 disposal pond. The sludge that accumulates in the beds is periodically (every 2 to 3 years) removed and disposed of either at the Central Facilities Area Landfill or Radioactive Waste Management Complex. In addition to sanitary sewage from buildings at TSF, the wastes released to the STP in the past included a number of process waste streams. Of these waste streams included paint, solvents, and thinners from the TAN-604 paint shop, which were treated in the TSF-11 clarifier pits.</p> <p>Contaminant of Potential Concern: radionuclides.</p> <p>Action: No Further Action; will require institutional controls until further risk assessment determines risk is $\leq 1E-04$.</p>		Yes	EC sign on east side	Rope around drying beds	No	Sign on plant door "Call 5914"	STD-101
		<p>Comment:</p> <p>None.</p>					
<p>Photo File: PN990405-1-33</p>		<p>Inspection Date: March 23, 2000</p>					

TSF-29, TSF Acid Pond East of RPSSA 647 and 648		Facility Security Fence	Signs	Fences	Other	Administrative for Access to the Site	Administrative to Work at the Site
<p>History: TSF-29 is an unlined pond that received radioactive and treated process wastewater from 1955 to 1958 in support of the ANP program. The pond was then reoriented and enlarged to receive both the wastewater and surface water until the project was canceled in 1961. The pond enlarged in 1967 to receive additional surface runoff water. In 1976 the pond was partially backfilled with soil containing radioactive particles from cleanup operations around TSF. Site investigations, field surveys, and soil data all show that radionuclide contaminants are present in the backfilled soil. The main contaminants of concern are Cs-137, Co-60 and Sr-90. These contaminants are not ubiquitous throughout TSF-29 but rather occur as random, isolated particles in the backfilled soil.</p> <p>Contaminant of Potential Concern: radionuclide</p> <p>Action: No Further Action Site requiring institutional control.</p>		<p>Yes</p>	<p>Yes</p>	<p>Yes</p>	<p>Gated entry point by bully barn</p>	<p>Access restricted, RWP, POD</p>	<p>RWP, POD, STD-101</p>
		<p>Comments:</p> <p>This site could not be accessed in March 2000 due to military maneuvers. Inspection of November 1999 was used.</p> <p>Inspection Date: November 3, 1999</p>					
<p>Photo File: PN990405-3-6</p>							

TSF-39, Transite Contamination Behind LOFT		Facility Security Fence	Signs	Fences	Other	Administrative for Access to the Site	Administrative to Work at the Site
<p>History: TSF-39 is an area that contains small pieces of asbestos cement (transite) and is believed to be the result of the construction activities for LOFT. Field inspections have determined that the asbestos material is encapsulated in cement and is not likely to be released.</p> <p>Contaminant of Potential Concern: asbestos</p> <p>Action: No Further Action Site requiring institutional control.</p>		No	ECA sign	Yes		Access restricted	STD-101
		<p>Comments:</p> <p>Site could not be accessed in March 2000 due to military maneuvers. Inspection of November 1999 was used.</p> <p>CERCLA site is within gravel pit, which is fenced.</p>					
<p>Photo File: PN990405-4-10</p>		<p>Inspection Date: November 3, 1999</p>					

TSF-42, TAN-607-A Room 161 Contaminated Pipe		Facility Security Fence	Signs	Fences	Other	Administrative for Access to the Site	Administrative to Work at the Site
<p>History: TSF-42 is the site of a 15.2-centimeter (cm) [6-inch (in)] pipe internally contaminated with radioactive material. The pipe is surrounded by concrete and is located under the floor of Room 161 in TAN-607-A, thus the contamination is "fixed." The TSF-42 pipe became internally contaminated as a result of discharging contaminated wastewater from cleaning processes. An additional 6 to 8 inches of concrete was placed and the pipe was grouted. Operating records for TAN 607 indicate decontamination and cleaning activities began in the late 1950s and were completed by 1984.</p> <p>Contaminate of Potential Concern: radionuclides</p> <p>Action: No Further Action Site requiring institutional control until completion of D&D&D.</p>		Yes	Yes	N/A		POD, RWP	STD-101, MCP-3562
		<p>Comment: Contamination if within the building, in a pipe surrounded by concrete.</p>					
<p>Photo File: PN990405-2-5</p>		<p>Inspection Date: March 23, 2000</p>					

TSF-43, RPSSA Buildings 647/648 and Pads		Facility Security Fence	Signs	Fences	Other	Administrative for Access to the Site	Administrative to Work at the Site
<p>History: TSF-43 consists of the Radioactive Parts Service and Storage Area (RPSSA) buildings TAN-647 and TAN-648, and the concrete and asphalt pads surrounding the buildings. TSF-43 is located in the northwest corner of the TSF. The buildings and surrounding pads are in a fenced, controlled access area. Current operational activities allow the storage of hazardous, classified, non-hazardous, and radioactive and/or radioactively contaminated items in TAN-647/648 or on the adjacent storage pads. The TAN-647 building is an interim status storage unit for certain hazardous wastes in the INEL Resource Conservation and Recovery Act (RCRA) Interim Status program. TSF-43 has been partially decontaminated many times in the past. The contaminants surface areas at TSF-43 were paved with asphalt in June and July 1993 as part of the TSF Facilities project to upgrade the roads in the RPSSA area. This effort stopped the spread of contamination from the pads into the surrounding soil and eliminates exposure to current or future workers. The soil below and surrounding the buildings and pads is part of site TSF-06.</p> <p>Contaminant of Potential Concern: radionuclides.</p> <p>Action: No Further Action Site requiring institutional control until completion of D&D&D.</p>		Yes	Yes	Yes	Gated entry point by bully barn	Access restricted, RWP, POD	RWP, POD, STD-101
		Comments: The buildings are still in use for storage.					
Photo File: PN990405-2-20		Inspection Date: March 23, 2000					

Appendix B

Institutional Controls at OU 1-07B Locations

Table B-1. Institutional control at OU 1-07B locations.

	Well	Location			Access Limitations	Site Condition and Comments ^a
		NAD27 Easting (ft)	State Plane Northing (ft)	NGVD29 Elevation (ft)		
B-1	ANP-8	362702.200	789215.640	4789.380	Within locked wellhouse, TAN-644	Locked
	GIN-1	360675.040	788854.080	4786.920	Locking cap	Locked
	GIN-2	361169.410	788930.140	4786.410	Locking cap	Locked
	GIN-3	361484.760	788532.260	4786.570	Locking cap	Locked
	GIN-4	361119.580	788922.620	4786.620	Locking cap	Locked
	GIN-5	361357.070	789392.930	4786.730	Locking cap	Locked
	MW-2	361863.344	788336.234	4787.390	Locking cap	Locked
	TAN-1	359274.310	795792.810	4789.640	Within wellhouse and security fence	Locked
	TAN-2	358789.290	796096.630	4793.410	Within wellhouse and security fence	Locked
	TAN-3	359061.470	796507.070	4790.890	Locking cap	Locked, inspected 3/28/00
	TAN-4	358378.370	795682.890	4801.320	Within security fence, locking cap	Locked
	TAN-5	358354.040	795647.380	4801.840	Within security fence, locking cap	Locked
	TAN-6	361772.370	793962.340	4786.870	Locking cap	Locked
	TAN-7	361768.580	793915.640	4786.760	Locking cap	Locked
	TAN-8	358066.160	793500.870	4790.370	Locking cap	Locked
	TAN-9	356986.830	795489.420	4780.730	Within security fence, locking cap	Locked, inspected 3/28/00
	TAN-10	356953.930	795191.920	4780.320	Locking cap	Locked
	TAN-10A	356923.100	795239.470	4780.700	Locking cap	Locked
	TAN-11	356932.270	795159.750	4780.500	Locking cap	Locked
	TAN-12	356905.680	795122.140	4780.650	Locking cap	Locked

Table B-1. (continued).

Well	Location			Access Limitations	Site Condition and Comments ^a
	NAD27 Easting (ft)	State Plane Northing (ft)	NGVD29 Elevation (ft)		
TAN-13A	356526.040	794111.460	4780.570	Locking cap	Locked
TAN-14	356550.610	794053.860	4780.910	Locking cap	Locked
TAN-15	361713.010	792166.100	4786.920	Locking cap	Locked
TAN-16	361713.720	792121.180	4786.880	Locking cap	Locked
TAN-17	358110.320	793497.310	4789.590	Locking cap	Locked
TAN-18	358255.870	795252.842	4802.964	Within security fence, locking cap	Locked
TAN-19	358237.490	795267.310	4803.390	Within security fence, locking cap	Locked
TAN-20	355662.200	794754.650	4781.240	Locking cap	Locked
TAN-21	359256.240	791009.140	4787.310	Locking cap	Locked
TAN-22A	361726.050	792013.560	4787.080	Locking cap	Locked
TAN-23A	361669.860	792051.850	4787.160	Locking cap	Locked
TAN-24A	362887.360	788266.010	4788.640	Locking cap	Locked
TAN-25	357020.155	795385.887	4782.161	Within wellhouse and security fence	Locked
TAN-26	357041.351	795372.079	4782.155	Within wellhouse and security fence	Locked
TAN-27	357207.350	795158.389	4780.430	Locking cap	Locked
TAN-28	357260.999	795380.648	4781.410	Within security fence, locking cap	Locked
TAN-29	357508.061	795330.841	4781.200	Within security fence, locking cap	Locked
TAN-30A	357269.793	795363.627	4781.350	Within security fence, locking cap	Visual verification of lock
TAN-31	356995.046	795450.794	4780.830	Within security fence, locking cap	Locked, inspected 3/28/00
TAN-32	357707.360	795025.293	4785.597	Locking cap	Locked
TAN-33	358326.087	795239.260	4797.961	Within security fence, locking cap	Locked

Table B-1. (continued).

Well	Location			Access Limitations	Site Condition and Comments ^a
	NAD27 Easting (ft)	State Plane Northing (ft)	NGVD29 Elevation (ft)		
TAN-34	357750.664	795197.389	4783.006	Locking cap	Visual verification of lock
TAN-35	357708.639	795224.956	4782.380	Locking cap	Drill rig over well
TAN-36	358258.802	794843.669	4793.856	Locking cap	Locked
TAN-37	357144.972	795366.706	4782.324	Within security fence, locking cap	Inside control area, pump installed, locked, inspected 3/28/00
TAN-38	358234.295	795047.439	4798.144	Within security fence, locking cap	Inside control area, pump installed, locked, inspected 3/28/00
TAN-39	358064.667	795155.772	4800.208	Within security fence, locking cap	Locked, inspected 3/28/00
TAN-40	357863.134	795288.438	4784.325	Within security fence, locking cap	Locked, inspected 3/28/00
TAN-41	357841.234	795281.769	4784.105	Within security fence, locking cap	Locked, inspected 3/28/00
TAN-42	357988.218	795200.096	4800.447	Within security fence, locking cap	Locked, inspected 3/28/00
TAN-43	358051.939	795139.386	4799.730	Within security fence, locking cap	Locked, inspected 3/28/00
TAN-44	358214.932	795039.604	4798.549	Within security fence, locking cap	Locked, inspected 3/28/00
TAN-45	358247.472	794936.047	4795.513	Within security fence, locking cap	Locked
TAN-46	358240.942	794840.580	4794.462	Locking cap	Locked
TAN-47	No survey data			Locking cap	Locked
TAN-48	359107.270	794694.050	4789.680	Locking cap	Locked
TAN-49	No survey data			Within security fence, locking cap	Locked
TAN-50	No survey			Locking cap	Locked

Table B-1. (continued).

Well	Location			Access Limitations	Site Condition and Comments ^a
	NAD27 Easting (ft) data	State Plane Northing (ft)	NGVD29 Elevation (ft)		
TAN-51	No survey data			Locking cap	Locked
TAN-52	No survey data			Locking cap	Locked
TAN-D1 Drainage Disposal	358628.800	794349.320	4788.880	Locking cap – storm water disposal well	Not locked
TAN-D2 Drainage Disposal	356960.120	795505.950	4779.890	Wellhouse within security fence	Inside control area, pump installed, locked, inspected 3/28/00
TAN-CH1	356797.620	795930.510	4779.020	Locking cap	Locked, inspected 3/28/00
TAN-CH2	358050.070	793457.420	4790.880	Locking cap	Locked
TSF-05	357000.614	795401.423	4782.153	Within wellhouse and security fence	Within GWTF, locked, access restricted
USGS-24	358398.920	795215.020	4795.820	Within well house with lock and security fence	Locked

a. Inspection of all well sites conducted on 3/27/00 unless noted.

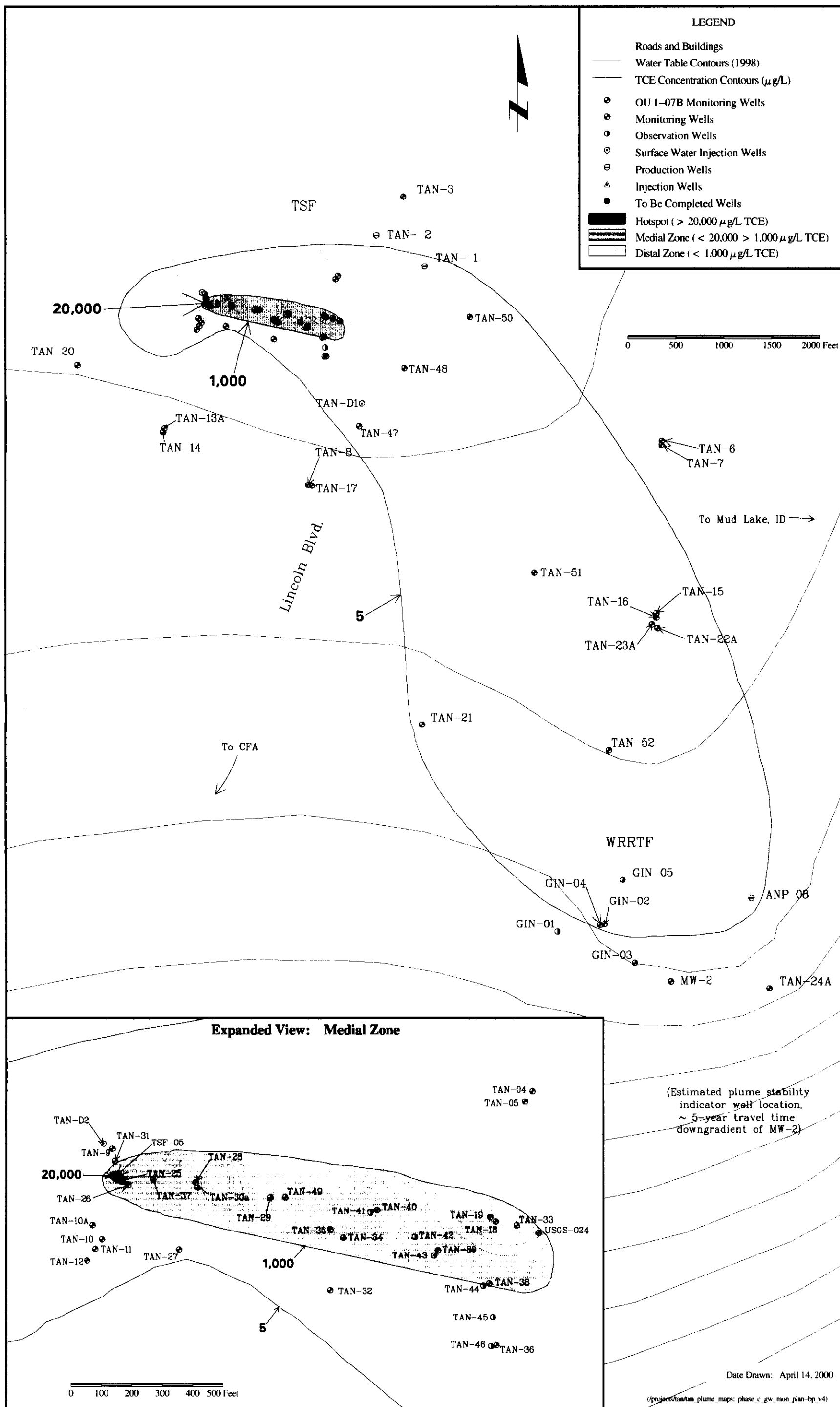


Figure B-1. Well locations in TSF-23.

Appendix C

Coordinates for OU 1-10 Sites

Appendix C

Coordinates for OU 1-10 Sites

C-1

Site Code	COORDINATES— <i>NAD27 STATE PLANE AND NGVD 1929 VERTICAL</i>				
	Point ID	North	East	Elevation	Descriptor
TSF-03	663	796731.78	358732.80	4801.18	TSF-03 BURN PIT
	664	796547.46	358747.45	4795.58	TSF-03 BURN PIT
	665	796575.82	358864.60	4793.44	TSF-03 BURN PIT SIGN
TSF-06, Area B	432	795815.54	357369.22	4780.03	TSF-06 N/W COR.
	433	795768.59	357340.77	4781.91	TSF-06 S.W. COR.
	434	795539.12	357690.68	4782.01	TSF-06 S/E COR. SIGN
	435	795594.98	357719.18	4781.40	TSF-06 N/E COR.
	1139	796355.21	357540.18	4777.66	TSF-06 AREA-B/TSF-43
	1140	796404.46	357459.81	4781.55	TSF-06 AREA-B/TSF-43
	1141	796309.08	357399.36	4780.80	TSF-06 AREA-B/TSF-43
	1142	796250.40	357486.03	4779.28	TSF-06 AREA-B/TSF-43
TSF-07	1089	794731.21	356500.23	4784.92	TSF-07
	1090	794794.19	356359.32	4780.15	TSF-07
	1091	795355.55	356601.85	4779.87	TSF-07
	1092	795540.30	356581.23	4779.56	TSF-07
	1093	795571.22	356545.96	4779.32	TSF-07
	1094	795719.50	356196.99	4779.25	TSF-07
	1095	795790.12	356229.33	4779.10	TSF-07
	1096	795835.06	356375.81	4784.06	TSF-07
	1097	795681.14	356706.65	4784.86	TSF-07
	1098	795661.38	356721.46	4784.46	TSF-07
	1099	795646.61	356727.65	4784.77	TSF-07 SIGN
	1100	795472.34	356792.24	4784.63	TSF-07
	1101	795419.83	356807.59	4785.25	TSF-07
	1102	795388.39	356802.64	4785.42	TSF-07

COORDINATES— <i>NAD27 STATE PLANE AND NGVD 1929 VERTICAL</i>					
Site Code	Point ID	North	East	Elevation	Descriptor
TSF-08	1104	795601.16	357771.39	4781.65	TSF-08, 13B
	1105	795590.08	357761.18	4781.55	TSF-08, 13B
	1106	795562.96	357792.78	4781.76	TSF-08, 13B SIGN
	1107	795574.78	357802.09	4781.64	TSF-08, 13B
TSF-09	1210	795912.76	358200.79	4781.92	TSF-09/SIGN
	1211	795963.12	358233.37	4781.84	TSF-09
	1212	795946.80	358258.55	4781.90	TSF-09
	1208	795896.46	358225.97	4781.85	TSF-18/TSF-09
TSF-18	1206	795878.40	358226.20	4782.29	TSF-18/SIGN
	1207	795891.02	358234.36	4782.42	TSF-18
	1208	795896.46	358225.97	4781.85	TSF-18/TSF-09
	1209	795883.85	358217.81	4782.12	TSF-18
TSF-26	581	795514.24	357328.65	4780.03	TSF-26 FENCE CORNER
	582	795557.29	357354.27	4780.86	TSF-26 FENCE CORNER
	583	795454.28	357525.25	4781.02	TSF-26 FENCE CORNER
	584	795500.27	357555.66	4780.96	TSF-26 GATE POST
	585	795517.22	357566.93	4780.82	TSF-26 GATE POST
	586	795562.33	357596.68	4781.32	TSF-26 FENCE CORNER
	587	795754.67	357304.90	4781.99	TSF-26 FENCE CORNER
	588	795740.60	357295.33	4781.42	TSF-26 FENCE CORNER
WRRTF-01	223	791781.29	361700.67	4786.60	GEOPHYSICAL S/W COR.
	224	791944.79	361722.39	4786.23	GEOPHYSICAL N/W COR.
	232	791885.77	362243.27	4788.16	GEOPHYSICAL N/E COR.
	233	791723.33	362222.09	4788.37	GEOPHYSICAL S/E COR.
	245	791804.16	361733.08	4786.38	BURN PIT 4 S/E COR. SIGN

COORDINATES— <i>NAD27 STATE PLANE AND NGVD 1929 VERTICAL</i>					
Site Code	Point ID	North	East	Elevation	Descriptor
WRRTF-13	22	789062.52	361959.40	4789.84	WRRTF-13
	23	789072.20	361960.03	4789.42	WRRTF-13
	24	789080.61	361956.26	4789.60	WRRTF-13
	25	789085.16	361939.76	4789.45	WRRTF-13 SIGN
	26	789081.97	361906.01	4789.21	WRRTF-13
	27	789075.16	361897.50	4789.21	WRRTF-13
	47	789025.78	361849.62	4790.02	WRRTF-13
	48	789019.92	361846.38	4789.90	WRRTF-13
	49	789031.50	361925.00	4790.85	WRRTF-13
	50	789034.47	361926.24	4790.85	WRRTF-13
	51	788972.71	361914.34	4789.78	WRRTF-13
	52	788956.86	361914.49	4789.66	WRRTF-13
	53	788921.64	361901.60	4788.91	WRRTF-13
	54	788898.99	361855.60	4788.80	WRRTF-13
	55	788891.95	361806.86	4788.36	WRRTF-13 SIGN
	56	788895.79	361796.88	4788.27	WRRTF-13
	57	788901.13	361788.42	4788.44	WRRTF-13
	58	788922.80	361786.34	4789.59	WRRTF-13
	59	788935.56	361819.08	4789.71	WRRTF-13
	60	788944.41	361826.68	4789.82	WRRTF-13
	61	788953.70	361828.75	4790.21	WRRTF-13
TSF-05	810	795404.79	356998.37	4781.46	TSF-05, TSF-23 SIGN
	811	795399.28	356994.66	4781.47	TSF-05
	812	795401.05	357004.04	4781.49	TSF-05
TSF-23	810	795404.79	356998.37	4781.46	TSF-05, TSF-23 SIGN

Wells are listed in Appendix B of this document

COORDINATES— <i>NAD27 STATE PLANE AND NGVD 1929 VERTICAL</i>					
Site Code	Point ID	North	East	Elevation	Descriptor
IET-04	464	802146.59	358708.19	4789.11	IET-04 LIMITS
	465	802137.94	358713.02	4789.31	IET-04 LIMITS
	466	802133.34	358753.71	4789.96	IET-04 LIMITS
	467	802119.96	358779.71	4790.65	IET-04 LIMITS
	468	802094.94	358998.06	4790.35	IET-04 LIMITS
	469	802124.75	359006.16	4790.00	IET-04 LIMITS
	470	802166.29	358815.66	4789.41	IET-04 LIMITS
	471	802179.31	358721.69	4788.69	IET-04 LIMITS
	472	802137.15	358812.08	4790.63	SIGN IET-04
	473	802140.20	358811.16	4790.70	MONUMENT IET-04
TSF-06, Area 1	1121	796168.19	357677.89	4781.85	TSF-06, AREA 1
	1122	796161.40	357718.56	4780.98	TSF-06, AREA 1
	1123	796209.08	357753.58	4779.88	TSF-06, AREA 1
	1124	796059.06	357972.86	4780.82	TSF-06, AREA 1
	1125	796077.07	357984.81	4780.84	TSF-06, AREA 1
	1126	795998.84	358110.07	4781.80	TSF-06, AREA 1
	1134	796261.19	357667.66	4781.70	TSF-06 AREA 1/TSF-29
	1147	796462.10	357703.18	4781.07	TSF-06 AREA 1/TSF-43
	1148	796767.66	357746.39	4781.97	TSF-06 AREA-1/TSF-43
	1149	796797.85	357757.94	4782.56	TSF-06 AREA-1/TSF-43
TSF-06, Area 5	1180	796464.44	358229.50	4780.74	TSF-06 AREA 1/SIGN
	133	2796085.67	357977.11	4781.47	TSF-06 AREA-5/SIGN
	1333	796112.83	357995.16	4781.43	TSF-06 AREA-5
	1334	796267.99	357767.19	4780.32	TSF-06 AREA-5
	133	5796240.14	357750.43	4779.67	TSF-06 AREA-5

COORDINATES— <i>NAD27 STATE PLANE AND NGVD 1929 VERTICAL</i>					
Site Code	Point ID	North	East	Elevation	Descriptor
TSF-06, Area 11	1167	796318.72	357700.96	4780.30	TSF-06 AREA 11 WEST/SIGN
	1168	796362.24	357708.50	4780.37	TSF-06 AREA 11 WEST
	1169	796290.85	357774.54	4780.01	TSF-06 AREA 11 WEST
	1170	796250.73	357840.13	4780.10	TSF-06 AREA 11 WEST
	1171	796231.63	357830.84	4780.47	TSF-06 AREA 11 WEST
	1176	796138.48	358182.36	4780.48	TSF-06 AREA 11 EAST SIGN
	1177	796117.48	358177.02	4777.93	TSF-06 AREA 11 EAST
	1178	796151.43	358061.17	4780.70	TSF-06 AREA 11 EAST
	1179	796169.88	358065.67	4780.78	TSF-06 AREA 11 EAST
TSF-10	800	795748.97	357199.31	4780.12	TSF-10 SIGN
	801	795929.08	356919.40	4778.49	TSF-10
	802	795926.07	356907.62	4777.95	TSF-10
	803	795901.37	356893.08	4778.26	TSF-10
	804	795772.48	356857.85	4779.61	TSF-10
	805	795675.11	356839.49	4779.90	TSF-10
	806	795574.70	356877.19	4779.89	TSF-10
	807	795526.89	356952.63	4779.56	TSF-10
	808	795498.35	357031.25	4779.71	TSF-10
TSF-28	809	795525.16	357059.54	4779.78	TSF-10
	761	795434.80	357392.81	4781.30	TSF-28
	762	795418.08	357400.57	4781.51	TSF-28
	763	795333.45	357421.11	4781.32	TSF-28
	764	795323.95	357420.18	4781.29	TSF-28
	765	795296.59	357376.06	4781.12	TSF-28
	766	795305.40	357324.48	4780.99	TSF-28
	767	795345.16	357288.26	4781.04	TSF-28
	768	795395.99	357281.71	4781.15	TSF-28
	769	795431.49	357318.02	4781.10	TSF-28
	770	795441.23	357355.35	4781.27	TSF-28

COORDINATES— <i>NAD27 STATE PLANE AND NGVD 1929 VERTICAL</i>					
Site Code	Point ID	North	East	Elevation	Descriptor
TSF-29	1134	796261.20	357667.66	4781.71	TSF-06 AREA 1/TSF-29
	1135	796280.77	357556.39	4780.46	TSF-29/TSF-43
	1136	796265.89	357556.27	4780.20	TSF-29/TSF-43
	1137	796265.85	357496.02	4779.50	TSF-29/TSF-43
	1138	796299.33	357515.40	4781.51	TSF-29/TSF-43
	1144	796302.66	357534.59	4779.98	TSF-29/TSF-43
	1145	796496.77	357552.51	4782.12	TSF-29/TSF-43
	1146	796464.10	357691.85	4779.42	TSF-29, SIGN
TSF-39	1246	803407.31	353709.22	4788.85	TSF-39
	1247	803405.44	353731.62	4789.16	FENCE TEE
	1248	803405.92	353126.89	4790.02	TSF-39
	1249	803404.76	353128.79	4790.02	GATE #30
	1250	803404.39	353107.65	4789.29	GATE #30
	1251	803403.24	353128.68	4789.76	TSF-39 SIGN
	1252	803456.34	353133.97	4789.39	TSF-39
	1253	803457.96	353218.89	4789.09	TSF-39
	1254	803462.62	353239.10	4789.29	TSF-39
	1255	803486.96	353248.90	4789.59	TSF-39
	1256	803548.00	353251.27	4789.43	TSF-39
	1257	803596.74	353214.72	4789.99	TSF-39
	1258	803627.94	353137.50	4790.36	TSF-39
	1259	803783.43	353127.89	4791.26	TSF-39
	1261	804617.23	353145.49	4791.84	TSF-39
	1262	804768.21	353192.75	4793.28	TSF-39
	1263	804948.41	353309.29	4794.49	TSF-39
	1264	806047.53	353309.23	4798.13	TSF-39
	1265	806047.32	353709.17	4796.54	TSF-39
TSF-42	749	795371.36	357961.27	4782.27	TSF-42, S/E COR. TAN-607

Site Code	COORDINATES— <i>NAD27 STATE PLANE AND NGVD 1929 VERTICAL</i>				
	Point ID	North	East	Elevation	Descriptor
TSF-43	1113	796878.29	357701.65	4779.72	TSF-43/TSF-06 AREA 7
	1114	796947.62	357594.82	4779.93	TSF-43/TSF-06 AREA 7
	1115	796894.28	357559.79	4779.83	TSF-43/TSF-06 AREA 7
	1116	796406.05	357243.01	4779.75	TSF-43
	1117	796404.71	357243.49	4779.67	TSF-43
	1118	796205.62	357555.35	4780.71	TSF-43
	1119	796207.14	357592.50	4780.46	TSF-43
	1120	796174.81	357641.09	4781.10	TSF-43
	1131	796824.71	357666.15	4779.25	TSF-43/TSF-06 AREA 7SIGN
	1113	796878.29	357701.65	4779.72	TSF-43/TSF-06 AREA 7
	1114	796947.62	357594.82	4779.93	TSF-43/TSF-06 AREA 7
	1115	796894.28	357559.75	4779.81	TSF-43/TSF-06 AREA 7
	1150	796835.93	357765.41	4781.19	TSF-43
	1147	796462.10	357703.17	4781.07	TSF-06 AREA 1/TSF-43
	1148	796767.66	357746.39	4781.97	TSF-06 AREA-1/TSF-43
	1149	796797.85	357757.94	4782.56	TSF-06 AREA-1/TSF-43